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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,856	01/08/2004	Srinivas Chari	CA920030077US1	6040
7590 Diana L. Roberts International Business Machines Intellectual Property Law 11400 Burnet Road Austin, TX 78758			EXAMINER RUTTEN, JAMES D	
			ART UNIT 2192	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS			MAIL DATE 04/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/753,856

Applicant(s)

CHARI ET AL.

Examiner

J. Derek Rutten

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/8/04, 10/21/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-25 have been examined.

#### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

3. The information disclosure statement filed 1/8/04 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because citation item AD appears to be a citation directed to a pending application, but does not contain an application number, filing date or inventor(s) as required by 37 CFR 1.98(b) (Also see MPEP 609.04(a)). It has been placed in the application file, but the citation (AD) has not been considered as to the merits. It is noted that the information disclosure statement filed 10/21/04 contains a similar citation item AB to a pending application number 10/753857. Even though this citation does not contain an indication of the inventors as required by 37 CFR 1.98(b), it has been considered since it is a reference to the instant application and the inventors are apparent. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

***Claim Objections***

4. Claims 4 and 16 are objected to because of the following informalities: A typo results in the presence of a semicolon instead of a period at the end of each claim. Appropriate correction is required.

5. Claims 10 and 22 are objected to because of the following informalities: A typo results in the presence of a semicolon instead of a colon in line 2 after "comprising," in each claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1, 2, 13, 14, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,795,868 to Dingman et al. (hereinafter "Dingman").

In regard to claim 1, Dingman discloses:

*In a programming environment, a method for developing a transformation program to transform a data structure from a first format to a second format, the program including a plurality of coupled data transformation modules describing the transformation (See Fig. 4), the method comprising the steps of:*

*generating a first transformation module of the plurality of transformation modules for assembling the program, the first module being a module type of a set of module types including a language constructed module type and a visually constructed module type; See Fig. 2 element 210, also column 9 lines 20-25. The “map designer 210” generates a map, or “module,” using language (“expressions or rules”) or visual (“graphically”) construction.*

*extracting reference information from the first module for accessing the first module when stored in a memory; and See column 9 lines 30-31 and 49-56, e.g. “transformation map repository.”*

*updating a module registry to include a first entry corresponding to the reference information of the first module, the module registry configured for having reference information entries extracted from both the language constructed modules and visually constructed modules. See column 9 lines 49-56, e.g. “metadata ... stored with each transformation map.” Dingman’s transformation maps include both visual and language construction as addressed above.*

In regard to claim 2, the above rejection of claim 1 is incorporated. Dingman further discloses: *the step of storing the first module in the memory*. See column 9 lines 30-31.

In regard to claim 13, Dingman discloses a system. See Fig. 2. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 14, the above rejection of claim 13 is incorporated. All further limitations have been addressed in the above rejection of claim 2.

In regard to claim 25, Dingman discloses: *A computer program product* See column 9 lines 10-13, e.g. "products." *a computer readable medium*; See column 6 lines 4-5, e.g. "RAM." All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 26, Dingman discloses: *A computer readable medium* See column 6 lines 4-5, e.g. "RAM." All further limitations have been addressed in the above rejection of claim 1.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-6 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman as applied to claims 2 and 14 above, and further in view of U.S. Patent 6,993,476 to Dutta et al. (hereinafter Dutta).

In regard to claim 3, the above rejection of claim 2 is incorporated. Dingman further discloses: *...using the first entry of the module registry*. See Fig. 2 elements 210 and 214, e.g. "LOAD." Dingman does not expressly disclose: *the step of generating a second transformation module coupled to the first module....* However, Dutta teaches coupling multiple transformation modules. See column 3 lines 14-27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Dutta's teaching of multiple transformations with Dingman's module registry in order to provide device compatible data as suggested by Dutta.

In regard to claim 4, the above rejection of claim 3 is incorporated. Dingman further discloses: *the step of updating the module registry to include a second entry corresponding to reference information of the second module*. Note that "updating" is generally addressed in the above rejection of claim 1. Further Dingman discloses a plurality of entries in column 9 lines 49-51, e.g. "each transformation map."

In regard to claim 5, the above rejection of claim 4 is incorporated. Dingman further discloses: *wherein the second module is of the module type different from the first module*. See column 9 lines 23-25.

In regard to claim 6, the above rejection of claim 5 is incorporated. Dingman further discloses: *wherein the first module is the language constructed module type and the second module is the visually constructed module type*. See column 9 lines 23-25, wherein the first module corresponds with the “expressions or rules” and the second corresponds with the “graphically” constructed mappings.

In regard to claims 15-18, the above rejection of claim 14 is incorporated. All further limitations have been addressed in the above rejection of claims 3-6, respectively.

10. Claims 7-9, 11, 19-21 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman as applied to claims 1 and 13 above, and further in view of U.S. Patent 5,586,328 to Caron et al. (hereinafter “Caron”).

In regard to claim 7, the above rejection of claim 1 is incorporated. Dingman does not expressly disclose: *wherein the module registry is a symbol table*. However, Caron teaches that module information is stored in a symbol table. See column 7 lines 37-48. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Caron’s symbol table with Dingman’s map repository in order



to determine which elements are available in a module as suggested by Caron (see column 8 lines 34-36).

In regard to claim 8, the above rejection of claim 7 is incorporated. Dingman further discloses: *the step of including identification information in the reference information*, See column 26 lines 30-37. Dingman does not expressly disclose: *the identification information including a name of the first reference module*. However, Caron teaches using an identification of a name of a module. See column 7 lines 37-39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Caron's name with Dingman's repository in order to determine the availability of modules as suggested by Caron (see column 8 lines 34-36).

In regard to claim 9, the above rejection of claim 8 is incorporated. Dingman further discloses: *the step of including content information in the reference information*. See column 9 lines 52-56.

In regard to claim 11, the above rejection of claim 1 is incorporated. Dingman does not expressly disclose: *wherein the first module includes a call selected from the group comprising a procedure and a function*. However, Caron teaches calling procedures and functions. See column 5 lines 57-65. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Caron's procedures and functions with Dingman's modules in order to return a value as suggested by Caron.

In regard to claims 19-21 and 23, the above rejection of claim 13 is incorporated.

All further limitations have been addressed in the above rejection of claims 7-9 and 11, respectively.

11. Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman and Caron as applied to claims 9 and 21 above, and further in view of U.S. Patent 6,243,859 to Chen-Kuang (hereinafter "Chen-Kuang").

In regard to claim 10, the above rejection of claim 9 is incorporated. Dingman further discloses: *wherein the content information is selected from the group comprising; ... a descriptive summary of functionality of the first module.* See column 9 lines 52-56. Dingman does not expressly disclose: *an argument, an argument type.* However, Chen-Kuang teaches storing arguments and argument types in a table. See column 2 lines 24-28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Chen-Kuang's argument table with Dingman's content information in order to analyze associated modules as suggested by Chen-Kuang (see column 1 lines 27-31).

In regard to claim 22, the above rejection of claim 21 is incorporated. All further limitations have been addressed in the above rejection of claim 10.

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12. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman as applied to claims 2 and 14 above.

In regard to claim 12, the above rejection of claim 2 is incorporated. Dingman further discloses: *the step of storing the first module in the memory in a file, the file configured for having at least two of the plurality of coupled transformation modules....* See column 9 lines 36-39, in view of column 3 lines 24-28. Dingman does not expressly disclose: *the two modules being of the same module type*. However, Dingman teaches a repository for storing a plurality of mappings (see column 9 lines 30-35). Dingman also teaches that mappings are created both graphically and programmatically (see column 9 lines 22-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Dingman's storage of multiple modules of the same type in order to store more than 2 mappings.

In regard to claim 24, the above rejection of claim 14 is incorporated. It is further noted that any use of a file carries provides the inherent use of a file system, otherwise the file could not exist. All further limitations have been addressed in the above rejection of claim 12.

### ***Conclusion***

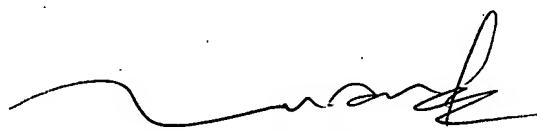
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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr



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SUPERVISORY PATENT EXAMINER